

PENDING CLAIMS AND STATUS THEREOF

1. **(currently amended)** A method of preventing processing errors due to ~~invalid pointers~~ pointer registers having invalid data, comprising:

setting trap flags associated with pointer registers to a reset condition after one of a power-up of a processor or a reset of the processor;

fetching from a one of the pointer registers an instruction having a pointer operand for execution;

determining whether a trap flag corresponding to the ~~pointer~~ one of the pointer registers is in a set or reset condition, wherein the set condition indicates the one of the pointer registers has valid data and the reset condition indicates the one of the pointer registers has invalid data; and

generating a trap control signal when the trap flag is in a reset condition.

2. **(original)** The method according to claim 1, further comprising:

triggering a trap interrupt based on the trap control signal.

3. **(currently amended)** The method according to claim 1, further comprising:

executing the instruction when the trap flag is in the set condition.

4. **(currently amended)** The method according to claim 1, further comprising:

changing the trap flag corresponding to the pointer from the reset condition to the set condition based upon a write of valid data to the pointer.

Claim 5 (canceled)

6. (currently amended) A method of preventing processing errors due to ~~invalid~~ pointers having invalid data, comprising:

providing trap flags, each corresponding to a pointer register;

~~resetting~~ setting the trap flags to a reset condition upon one of a power up or reset; and

setting the trap flag corresponding to each pointer register based on valid data being written to the pointer register ~~being written~~.

7. (currently amended) The method according to claim 6, further comprising:

generating a trap control signal when an instruction causes the processor to read ~~[[reads]]~~ a pointer register having a corresponding ~~[[with a]]~~ trap flag set to the reset condition.

8. (original) The method according to claim 7, further comprising:

triggering a trap interrupt based on the trap control signal.

9. (currently amended) A processor having logic that prevents processing errors due to ~~invalid pointers~~ pointer registers having invalid data, comprising:

instruction fetch and decode logic for fetching and decoding instructions;

registers for holding data;

trap flags associated with the registers, each trap flag corresponding to a one of the registers ~~register~~ and each trap flag indicating a set or reset condition, wherein the trap flags are in the reset condition after a processor power-up or reset and in the set condition after valid data is written to the associated register; and

a pointer trap coupled to the trap flags, the pointer trap generating a trap control signal based on decoding an instruction that reads a one of the registers ~~register~~ that has a corresponding trap flag in the [[a]] reset condition, whereby the trap flag in the reset condition indicates the register has invalid data.

10. (currently amended) The processor according to claim 9, wherein the trap control signal is only generated when the register being read from is ~~[[acting]]~~ being used as a pointer register.

11. (original) The processor according to claim 9, further comprising interrupt logic for generating an interrupt based on the trap control signal.

12. (currently amended) The processor according to claim 9, further comprising:
a reset/power up unit coupled to the trap flags, wherein the reset/power on unit ~~resetting causes~~ the trap flags to be in the reset condition upon a reset/power up.

13. (currently amended) The processor according to claim 9, further comprising:
a trap flag control unit coupled to the trap flags, wherein the trap flag control unit ~~resetting causes~~ the trap flags to be in the reset condition upon a reset/power up and to be in the set condition ~~setting each trap flag based on when~~ the corresponding ~~register having been~~ registers have valid data written thereto ~~by an instruction~~.